

ABSTRACT

A fixture (30) adapted to permit the heated exchange of a liner (14)
5 from an operating vertical furnace (10). The fixture is adapted to secure to the
base of the liner (14) to both unlock and lower the heated liner, such as a silicon
carbide liner, at an controlled rate. The fixture is also adapted to elevate a new
liner into the operating vertical furnace at a controlled rate to control the rate of
heating of the liner as it is inserted into the operating vertical furnace. The fixture
10 includes an inner ring (34), a low-friction Teflon[®] ring (36), and an outer ring (38)
permitting the rotation of the inner ring within the outer ring. Advantageously,
the low friction ring comprises a flanged portion and a vertical portion allowing
rotation of the inner ring within the outer ring even when elevated at extreme
temperatures exceeding 500 ° C.